

Iranian High School Students' Performance on Reading Comprehension of Their English Course book: Analyzing the Effects of Unknown Vocabulary

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Abstract

The main purpose of this study was examining the percentage of vocabulary size or vocabulary knowledge required for comprehending high school English course book texts in grade three. To reach this aim, the students' performance on texts with different levels of unknown vocabulary densities was examined. Another purpose of the study was to determine the threshold level of comprehending English texts of high school course book in grade three. Through determining this level, it would be possible to see what percentage coverage was set that above which comprehension would be adequate and below which comprehension would be inadequate. To conduct the study and reach the aims of the study, 50 students were randomly divided into five homogeneous groups. The subjects in each group answered to a reading comprehension test containing texts with different densities of unknown vocabularies (an intact text, and texts with 1% to 5% unknown vocabularies). At the end, the students were scored based on their performance on the reading comprehension tests. The ANOVA statistical analysis was used to determine the differences in the group performances on the tests. Results revealed that the students who took the intact texts performed better than those who took the tests with manipulated texts. ANOVA analysis confirmed such differences ($F = 86.371$, $sig. = .00$, $p < 0.01$). A stepwise regression analysis demonstrated that there was not a threshold level set for the high school students which determines above and beyond the comprehension of texts.

Keywords: reading comprehension; unknown vocabulary; EFL; threshold level; Iranian high school students; vocabulary size

INTRODUCTION

English as a foreign language (EFL) which has gained its precious position in dissemination of knowledge throughout the world is given a crucial role in Iranian educational system. Learning this language in Iranian context is being facilitated through practicing four skills i.e., reading, writing, listening, and speaking; however,

reading comprehension has attained more emphasis than other skills in English textbooks particularly high school textbooks.

Reading comprehension is always a grand task for the students who want to learn a foreign language. Reading is a process involving the activation of relevant knowledge and related language skills to accomplish an exchange of information from one person to another (Chastain, 1988). One of the key components affecting performance on reading comprehension is vocabulary knowledge. This skill is highly sensitive to the text type and vocabulary size of the passage (Laufer, 1989). So the stimulation for the present study has been having an eye on vocabulary size and performance on reading comprehension tests with different percentage of vocabulary size.

Importance of vocabulary in EFL and ESL (English as a second language) contexts was overemphasized, as Meara (1980) noted, since 1980s. This special attention to vocabulary has continued up to the present time (Meara, 2002). The role of vocabulary in reading comprehension has been revived, and that we need research to determine the effect of different dimensions of this variable on the reading comprehension. One of the main areas where the relationship between vocabulary knowledge and reading comprehension can be illuminated is the level of vocabulary knowledge that EFL learners require in order to be able to reasonably comprehend the texts (Laufer, 1992). Through such studies it could be possible to identify the vocabulary size of the learners and find out the level of text difficulty which adapts their current vocabulary knowledge. Such findings could have valuable implications for EFL textbook providers in Iran.

Increasing vocabulary knowledge help students to increase their listening, speaking, writing, especially reading skills and improve comprehension and production in second language (L2) and lack of vocabulary knowledge, as researchers such as (Thornbury, 2002) noted, can lead to major problems in L2 learners' learning process. Reading comprehension, on the other hand, is regarded as one of the most important skills needed for the EFL learners. The relationship between these two constructs, i.e. vocabulary knowledge and reading comprehension is of utmost importance (Stahl, 1983). Findings of the previous studies revealed the rigor relationship between vocabulary knowledge and reading comprehension.

Determining the density and coverage of these unknown words and students' vocabulary size require research. However, reviewing literature reveals that in Iranian context, to the best knowledge of the researcher, no studies ever done on the effect of unknown vocabulary density on reading comprehension of high school students in their English course books. Therefore, the present study investigated the effect of unknown vocabulary density on Iranian high school students' reading comprehension of their English course book. To reach this aim, it is required to examine the students' performance on texts with different levels of unknown vocabulary densities. Through such analysis, it would be possible to judge what vocabulary level is required to understand reading texts of high school English course book in grade three, and also what percentage of unknown vocabulary densities may affect students' comprehension.

Another purpose of the study is to determine the threshold level of comprehending English texts of high school course book in grade three. Through determining this level, it will be possible to see what percentage coverage is set that above which comprehension will be adequate and below which comprehension will be inadequate. Therefore, the study addresses the following research questions:

Q1: Do different densities of unknown vocabulary words (i.e., 1%, 2%, 3%, and 4%) result in significant differences in comprehension of high school English course book texts in grade three?

Q2: Is there a vocabulary coverage level which predicts adequate and inadequate comprehension of high school English course book texts in grade three?

The findings of the current study may explain potential reading problems relevant to the vocabulary size needed for reading unsimplified high school English texts. By providing statistics and measures about Iranian high school students vocabulary size that are common in the field of vocabulary and reading research, language educators in Iran may use the findings of the current study to relate to the huge body of research on L2 reading and to improve L2 reading instruction and vocabulary acquisition conditions. Moreover, findings of this study will be helpful in determining the level of vocabulary knowledge needed for comprehending reading texts of English course book of high school, grade three.

REVIEW OF LITERATURE

Reading Comprehension

Maria (1990) defines reading comprehension extracting meaning from the texts through integrating readers' background knowledge. In high school level, students may encounter and face many interactions less than university-level students; however, attention should be given to these reading prerequisite strategies during training students for the language learning tasks. The same as Maria (1990), Snow (2002) defined reading comprehension as the process of deriving meaning from the text; however, for him, this extraction coincidences with meaning making. This means that the process entails reader, text, and the action of comprehension not just the text. Snow (2002) contended that the reader brings all the potentials and knowledge to the process.

Reading comprehension has always been of paramount importance in Iranian educational system, and comprehension of both general and academic texts has been the aim of many educational centers for years. This precisely can be due to the fact that there have been many people wishing to understand what the texts of both academic and non-academic wants to say in the target language so that they can follow their aims regarding their profession and/or any other motivation they have. Therefore, in many language centers and institutes much attempt has to be made by teachers to teach students the appropriate strategies for understanding the texts of the target language they learn.

Main Factors in Teaching Reading Comprehension

Bottom-up processing

Bottom-up process as a kind of cognitive process is defined as the processes “that take in stimuli from the outside world - letters and words, for reading - and deal with that information with little recourse to higher-level knowledge” (Treiman, 2001, p. 2). Instructors who uphold the bottom-up processing direct their attention towards the ways learners extract information from the text for the purpose of automatic word recognition and fast reading (Lee, 2009).

Top-down processing

Treiman (2001) defines top-down process, as a process in which “the uptake of information is guided by an individual’s prior knowledge and expectations” (p. 2). He maintains that theories that stress top-down processing suppose that readers make hypotheses about what words they may encounter during reading and take sufficient visual information to test their hypotheses. In top-down processing, according to Brown (2001) and Erkan (2005), readers come to the reading process with some knowledge of the world around them. By using this knowledge and with relying on their intelligence and experience, readers tend to understand the text. In other words, in top-down process, “prior knowledge plays a major role in learner’s comprehension” (Lee, 2009, p. 182). Some researchers like Hudson (1982) even believe that high degree of prior knowledge can compensate the linguistic deficiencies.

Schema theory

Field (2004) defines schema as “a complex knowledge structure which groups all that an individual knows about or associates with a particular concept” (p. 254). Therefore, meaning does not solely reside in the text itself but the readers’ background knowledge and his/her ability to relate previously acquired information to the newly received materials make meaning. Field (2004) maintains that there are different types of schemata involved in the reading process; content schema, formal schema, and linguistic schema. The schemas which provide background knowledge to the interpretation of a text are referred to as content schema. By using this schema readers can compare the events presented in the text with what they have already experienced.

Vocabulary Knowledge

Similar to the complexity of the discussion on 'word', regarding vocabulary knowledge, there are even more complex discussions and questions such as ‘*What does it mean to know a word?*’ or ‘*what is vocabulary knowledge?*’ (Read, 2000). What does it mean to ‘*know a word?*’ As Labov (1973) mentioned, “words have often been called slippery customers, and many scholars have been distressed by their tendency to shift their meanings and slide out from under any simple definition” (p.341). Many L2 learners regard vocabulary learning as a matter of memorizing L2 word lists. Thus, they go to a bilingual dictionary whenever they encounter and unknown word. Very often, their

vocabulary knowledge simply involves knowing rough L1 equivalents for L2 words, and yet with this knowledge they can do quite well on vocabulary tests which look only to see whether a learner can match or produce L2 words with their L1 equivalents. Nevertheless, as a matter of fact, vocabulary knowledge goes beyond this simplistic perspective, especially when it comes to pedagogical research.

Richards (1976) presented a set of principles regarding lexical competence. These principles are as follows:

1. The native speaker of a language continues to expand his vocabulary in adulthood, whereas there is comparatively little development of syntax in adult life.
2. Knowing a word means knowing the degree of probability of encountering that word in speech or print. For many words we also know the sort of words most likely to be found associated with the word.
3. Knowing a word implies knowing the limitations imposed on the use of the word according to variations of function and situation.
4. Knowing a word means knowing the syntactic behavior associated with the word.
5. Knowing a word entails knowledge of the underlying form of a word and the derivations that can be made from it.
6. Knowing a word entails knowledge of the network of associations between that word and other words in the language.
7. Knowing a word means knowing the semantic value of a word.
8. Knowing a word means knowing many of the different meanings associated with a word. (Richards, 1976, p. 83)

Nation (1990), though acknowledging the Richards' (1976) definition of knowing a word, added important components as pronunciation and collocations to make the framework more inclusive. He proposed 16 questions on what are necessary to fully know a word with the incorporation of the receptive-productive distinction. According to Nation' (1990) classification system, he also indicated that the ability to use a word (i.e. production) requires further knowledge that the ability to understand it (i.e. reception) does.

The role of vocabulary in Reading comprehension

Many researchers working in first language (L1) and second or foreign language (L2) unanimously emphasized the strong correlation between vocabulary knowledge and reading comprehension (e.g., Davies, 1968; Klare, 1974; Zheng, 2002; Krashen, 1989; Laufer, 1992). Nagy (1988) stated that "vocabulary knowledge is fundamental to reading comprehension; one cannot understand text without knowing what most of the words mean" (p. 2). During reading a text, the reader's general vocabulary knowledge is the best predictor of the way that reader can understand the text (Anderson & Freeboy,

1981, cited in Nagy, 1988). Nagy (1988) argues that increasing vocabulary knowledge is a basic and fundamental part of the process of education. In contrast, lack of adequate vocabulary knowledge is an obvious and serious obstacle for many students. Advances in knowledge, simultaneously, will create an ever-increasing concepts and words that people must master to be literate and employable.

Density and Coverage

As Hu and Nation (2000) asserted, there have been several studies attempting to determine the amount of vocabulary needed by a second language learner in order to be able to read with reasonable comprehension. One approach to this has been to take common sense view of the issue and to see how the density of unknown vocabulary and vocabulary size are related in various kinds of texts. This approach makes assumptions about desirable and undesirable densities (Hu & Nation, 2000). The bases for these assumptions are provided in Table 1.

Table 1. The number of unfamiliar tokens per 100 tokens and the number of lines of text containing one unfamiliar word

% text coverage	Density of unfamiliar and familiar tokens	Number of text lines per 1 unfamiliar word
99	1 in 100	10
98	1 in 50	5
97	1 in 33	3.3
96	1 in 25	2.5
95	1 in 20	2
90	1 in 10	1
80	1 in 5	0.5

Table 1 shows that if learners have an 80% coverage of the running words or tokens in a text, then one in every five running words is likely to be an unknown word. This is the same as there being two unknown words per line, if a line contains on average about ten words. A density of two unknown words per line, particularly two unknown content words, would make reading very difficult and would probably result in low levels of comprehension.

The main finding of all the above reviewed studies is that vocabulary knowledge is the fundamental issue in the process of language learning, in general, and reading comprehension which is the focus of this study, in particular. An important related implication is that the vocabulary level of the EFL/ESL learners should be estimated and closely studied before any decision on proving reading texts for them. It means that researchers need to determine the number of words required for understanding texts of various language complexities. Nation (2001), for instance, offered a vocabulary size of 2000 word families and a good knowledge of academic vocabulary for comprehending about 90% of unsimplified English texts. However, it is hypothesized that the nature of the text and the genre of the text also effect on the complexity and understand of the text.

Therefore, based on the reviewed empirical studies, the present study will examine the above-mentioned heavier densities of unknown vocabulary size (i.e. 1%, 2%, 3%, 4%, & 5%.) on the performance of Iranian EFL learners studying grade three in high school. Through the analysis of results, it will be possible to determine what vocabulary level is required to fully understand the reading texts of Iranian high school English course book in grade three.

METHOD

Participants

The participants were chosen from among the high school students in grade three studying at Zanjan . They were three intact classes (around 90 students) and from among them 50 students were selected based on their scores on the Vocabulary Levels Test (Nation, 2001). The subpart of VLT given to the participants was the third level (containing 3000 most frequent word families) in order to extract a homogeneous group of subjects. These students were randomly divided into five 10-member groups. Each group, subsequently, took one of the reading comprehension tests that will be discussed in the following sections.

Instrumentation

To conduct this study in accordance its predetermined purposes, two kinds of tests as the instruments were used. First, a Vocabulary Levels Test (VLT) developed by Nation (1990, 2001), originally as a diagnostic vocabulary test for classroom teachers and then it was later used to estimate vocabulary size of L2 learners of general or academic English (Read, 2000) by measuring single meanings of content words at four frequency levels (2000, 3000, 5000, and 10000 words) with a word-short definition matching format.

Reading comprehension was the second test administered among the subjects of the study. This test included five variable formats piloted among a group of students similar to the subjects of this study to calculate the reliability and validity indices. The first test included an intact text which directly extracted from the high school English book in grade three. In the second test, 1% of the less frequent academic words of the chosen text were replaced with nonsense English words. The idea behind this replacement is that some learners may be familiar with the less frequent words of English by having seen those words in their self-studies. So by using nonsense words, the effect of background vocabulary knowledge vanishes (Nation, 2006). In the third reading comprehension test, the percentage of replaced nonsense vocabulary was 2%, the fourth test 3%, and finally the fifth one 4%. The test format, by which the reading comprehension tests evaluated, was multiple-choice test made based on the chosen text.

Procedure

First, to have a homogeneous group of high school students in grade three, the Vocabulary Levels Test was administered. Then, the five variable formats of reading

comprehension tests were given to the subjects from complex to simple, that is those texts with more nonsense words appeared at the early stages of test taking to lessen the amount of text familiarity so that the scores can show a precise measurement of the intended construct, i.e. reading comprehension. At the end, the students were scored based on their performance on the reading comprehension tests.

Data analysis

After giving tests and scoring them, the obtained data were fed into Statistical Package for Social Sciences (SPSS) in order to analyze them. To this end, a simple regression analysis and a one-way ANOVA were used to determine the effect of different unknown vocabulary size on reading comprehension.

RESULTS

ANOVA analysis

In order to compare the performance of the subjects on the five given texts as tests, a one-way ANOVA was conducted. In this study, the performance of the subjects on different versions of the same test was the dependent variable. The descriptive statistics of the five tests for this study goes as follows (Table 2).

Table 2. Descriptive statistics for test performance of five separate groups

N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
				Lower Bound	Upper Bound			
1	10	9.5000	.52705	.16667	9.1230	9.8770	9.00	10.00
2	10	7.8000	.63246	.20000	7.3476	8.2524	7.00	9.00
3	10	7.1000	.56765	.17951	6.6939	7.5061	6.00	8.00
4	10	6.2000	.63246	.20000	5.7476	6.6524	5.00	7.00
5	10	4.9000	.56765	.17951	4.4939	5.3061	4.00	6.00
Total	50	7.1000	1.65677	.23430	6.6292	7.5708	4.00	10.00

The descriptive table provides some very useful descriptive statistics, including the mean, standard deviation and 95% confidence intervals for the dependent variable (reading comprehension) for each separate group, as well as when all groups are combined (Total). As Table 1 showed, means of five groups were different. These means were ranked from the highest (for the intact group) to the lowest (for the group took the test with 4% unknown vocabulary densities). To see if such mean differences were significant, one-way ANOVA was run. Results are presented in Table 3.

Table 3. ANOVA results for the significance of mean differences

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	119.000	4	29.750	86.371*	.000
Within Groups	15.500	45	.344		
Total	134.500	49			

*P<0.01

As the results of ANOVA analysis in the Table 3 indicated, there was a statistically significant differences between groups as determined by one-way ANOVA ($F(4, 45) = 86.371, P = .000$).

The Tukey post-hoc test is generally the preferred test for conducting post-hoc tests on a one-way ANOVA. We can see from the table below that there is a significant difference between five groups that took the tests of different unknown vocabulary densities. These differences were mainly observed between group one (intact group) with other four groups ($p = .000$), group two (those who took the test with 1% unknown word in the text) with groups four and five ($p = .000$), group three (those who took the test with 2% unknown words in the text) with groups four and five ($p = .031$ and $p = .000$, respectively), and group four (those who took the test with 3% unknown words in the text) with groups five ($p = .001$). However, there were no differences between the groups two and three that took the tests with 2% and 3% ($p = 0.150$). The results indicated that all four first groups performed differently in comparison with group five.

Table 4. Results of Tukey post-hoc test for Multiple Comparisons of Means

(I) Groups	(J) Groups	Mean			95% Confidence Interval	
		Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	1.70000*	.26247	.000	.8570	2.5430
	3	2.40000*	.26247	.000	1.5570	3.2430
	4	3.30000*	.26247	.000	2.4570	4.1430
	5	4.60000*	.26247	.000	3.7570	5.4430
2	1	-1.70000*	.26247	.000	-2.5430	-.8570
	3	.70000	.26247	.150	-.1430	1.5430
	4	1.60000*	.26247	.000	.7570	2.4430
	5	2.90000*	.26247	.000	2.0570	3.7430
3	1	-2.40000*	.26247	.000	-3.2430	-1.5570
	2	-.70000	.26247	.150	-1.5430	.1430
	4	.90000*	.26247	.031	.0570	1.7430
	5	2.20000*	.26247	.000	1.3570	3.0430
4	1	-3.30000*	.26247	.000	-4.1430	-2.4570
	2	-1.60000*	.26247	.000	-2.4430	-.7570
	3	-.90000*	.26247	.031	-1.7430	-.0570
	5	1.30000*	.26247	.001	.4570	2.1430
5	1	-4.60000*	.26247	.000	-5.4430	-3.7570
	2	-2.90000*	.26247	.000	-3.7430	-2.0570
	3	-2.20000*	.26247	.000	-3.0430	-1.3570
	4	-1.30000*	.26247	.001	-2.1430	-.4570

*. The mean difference is significant at the 0.05 level.

To seek answer for the second research question, a regression analysis was run through the stepwise method to see which test predicts adequate or inadequate comprehension level of reading texts in high school English course book. Results of the analysis are displayed in Table 4, all the tests entered into the regression equation.

Table 5. Predicting adequate and inadequate comprehension of high school English course book texts in grade three

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.889	5.097		.959	.381
1					
Group 1	-.370	.347	-.344	-1.066	.335
Group 2	.074	.296	.083	.250	.813
Group 3	-.037	.375	-.037	-.099	.925
Group 4	.519	.330	.578	1.569	.177

Dependent variable: Group 1

Table 5 indicated the regression coefficient. The standard beta and non-significance of t value of all four predictors demonstrated that performance of Iranian EFL high school students in grade three did not predict their adequate or inadequate comprehension level. Therefore, the second null hypothesis of the study which is "there is not a vocabulary coverage level which predicts adequate and inadequate comprehension of high school English course book texts in grade three" was accepted.

DISCUSSION

Discussing the role of vocabulary in reading comprehension and/or even teaching of vocabulary in EFL/ESL contexts involves a set of fairly answers for the posed questions. Grabe (2009) stated that one of these important questions is "how many words can be taught for understating different texts?". This question itself implies that there is a strong relationship between vocabulary and reading comprehension. Such strong relationship has been reported in many studies (Carver, 2003; Verhoeven, 2000; Qian, 2002). The researchers confirmed that understanding a text is highly dependent on the level of vocabulary coverage that reader may possess. Grabe (2009) argues that making decisive decision on the level of vocabulary coverage for understanding texts is impossible. The reason is related to the specificity of the texts and the genre to which they belong. However, he suggested that "readers should know 95 percent of the words in a text to read it successfully with instructional support" (p. 271). Grabe (2009) maintained that at this level in each two line just one or two unknown vocabulary may exist which required to be instructionally supported for comprehension especially in cases which unknown vocabularies hold the high degree of new information in the text. Therefore, this level makes the text an instructional one and readers can understand it through the "help, support, and good strategies" (ibid: 271).

Results of this study partially confirmed the Grabe's (2009) contention that readers can read texts independently with 95% of known words. The findings indicated that Iranian high school students in grade three performed weaker on texts with 4% unknown words than the texts with 3%, 2%, 1% or without unknown words. Therefore, it can be said that these students need to be instructed even for the texts with 96% known words. The reason may be related to the nature of the texts. They are organized and

written in a way that changing even 4% of the known words to unknown words can change the students' comprehension.

Results of the study also revealed that the comprehension of students across texts of 2% and 3% did not show significant differences. This finding indicated that inserting one unknown word in every 5 or 3.3 line makes no changes in the students' comprehension. However, their comprehension level is lower than those who took the tests with texts of 1% or without unknown vocabulary insertion. This may also help Hu and Nation (2000) change their assumption beyond desirable and undesirable densities in texts. They can converge 2% and 3% and make changes in every 4.15 line.

As it was presented in chapter three, the level of VLT test used in this study was the third level (containing 3000 most frequent word families) and those students who performed well on the tests possessed such level of vocabulary. Changing the vocabularies to unknown words affected these students comprehension. Therefore, it can be implied that students in grade three need to have vocabulary knowledge of 3000 most frequent word families in English. They can understand texts of this level independently.

The primary hypothesis of the study delineated a threshold level for comprehending English texts of high school in grade three. However, findings indicated that there was not such a level. Therefore, it is not possible to suggest a threshold level for comprehending texts of grade three. This finding is somehow in contrast with Keshavarz and Mohammadi (2009). They reported that texts with vocabulary coverage of 95% would predict the subjects reading comprehension. They also found out that densities of unknown vocabulary in academic texts affected the university students' reading comprehension which is in line in what the present study found among high students. This similar finding corroborated other studies i.e., Laufer, (1989); Meara & Jones, (1990); Hu & Nation, (2000).

CONCLUDING REMARKS

The main conclusion of this study is that the density of unknown words has a significant effect on text comprehension. One of the most important findings in this study was that the higher the unknown vocabulary size, the lower the scores at reading comprehension of English high school texts in grade three. Therefore, it is reemphasized that the knowledge of vocabulary facilitates reading comprehension in English (Nation, 1983).

The texts used in this study were extracted from the English high school texts in grade three. Results of the study showed that students in this level need to have vocabulary knowledge of 3000 words. However, they did not indicate any comprehension level for determining the adequate and inadequate understanding of the texts. Therefore, in contrast to Grabe (2009) who suggested that students with vocabulary coverage of 95% of the text can independently comprehend the text, this study could not find experimental evidence.

Findings of this study were confirmatory evidence for the relationship between vocabulary knowledge and reading comprehension. From these findings it can be concluded that vocabulary knowledge is essential for comprehending texts at any rate or level. Such conclusion which is a restatement of previous results in the above-mentioned studies puts heavy responsibility on the shoulders of the instructors and material designers. They have to provide different strategies for the learners to acquire necessary words.

Though it was shown that unknown vocabulary densities affected Iranian high school students' reading comprehension in grade three, it must be noted that one should not ignore the comprehension principle suggested by Krashen (1989). Learners need to face some challenges in the texts and one of these challenges is unknown vocabularies manipulated in the texts. Professional selection of the texts and manipulation of them not only does not hinder comprehension, but also facilitates readers' involvement in the process of reading comprehension.

PEDAGOGICAL IMPLICATIONS

Maybe the main implication of the study is for EFL teachers and material designers for high school students particularly those studying in grade three. Teachers should know that each learner have special vocabulary knowledge and there are some word classifications attributed to the level of students. Therefore, they cannot choose reading texts haphazardly and expect their student comprehend them well. They need to test the students' level of vocabulary knowledge and then select the suitable materials adapted to the students' level.

Teachers and material designers for students of grade three in high school need to be aware that these students need to have vocabulary knowledge of 3000 most frequent word families. Therefore, their texts must be at this level since finding of this study indicated that beyond this level students have low comprehension. Moreover, it is critically important that Iranian high school learners in grade three become familiar with the most frequent 3000 words of English as quickly as possible.

Another useful application of the findings of the present study can be to the students themselves. They have to be cautious in the selection of the texts they are going to read along with the texts provided in their English textbook. They can select the suitable existing reading books in the market. Because in this case, the inconsistency between the students' reading ability level and the required vocabulary size lowers and they can easily tackle with the job of reading and better comprehension.

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